

As it runs over the ground, this insect looks extremely like a bit of thistle-down blown by a gentle breeze. The resemblance is so extraordinary, that it is difficult to realize that it is an insect until it is actually in the killing-bottle. It proceeds in a zigzag

jerky manner, so increasing the illusion. What is the purpose of this mimicry, I do not know; these creatures possess powerful stings, and most of the allied forms seem to be warningly colored—usually contrasts of black and red.

T. D. A. Ckll.

IV. NEW SPECIES OF COCCIDAE.

BY T. D. A. COCKERELL.

Aspidiotus hartii, n. sp. — ♀ scales irregular, subcircular to oval, about $1\frac{1}{2}$ mm. diam., moderately convex, dull brownish-gray, with a slight purplish tint; first skin partly covered or entirely exposed, shining pale straw-color, nearly central. When removed, the scales leave a conspicuous white mark, with no black ring.

♂ scale colored like that of the ♀, small, elongate, with the exuviae near one end.

♀ brown, becoming pale lemon yellow when boiled in soda. 5 groups of ventral glands, median of about 4, cephalolaterals 9, caudolaterals 6 to 7. Anal orifice posterior to level of caudolateral glands, but some distance from hind end. No long tubular glands at bases of lobes. Two pairs of lobes only; median large with parallel sides and gently rounded subtruncate ends, slightly diverging, not contiguous, obscurely notched at end towards outer side. Second lobes similar in shape, but much smaller. Two rather stout branched plates between the median lobes, and two between 1st and 2nd lobes. Margin cephalad of 2nd lobe with first three stout strongly branched plates close together, then three equally long but not so stout and only slightly branched plates further apart. Then two very slender small plates, then a long interval, then the margin coarsely serrate, with about 6 serrations.

Hab. Trinidad, West Indies, in great numbers on tubers of yam. Sent by Mr. Hart, of the Royal Botanic Gardens. The occurrence of an *Aspidiotus* on yams was

hardly expected; though Mr. Barber had sent me from Antigua a new *Lecanium* (*L. batatae* Ckll. ined.) on sweet potato tubers. The present insect is allied to *Aspidiotus sacchari* Ckll., 1893.

Aspidiotus sphaerioides, n. sp. — ♀ scale circular, rather over 1 mm. diam., in numbers on the leaf, moderately convex, dark reddish-brown, with the part covering the exuviae indicated by a pale raised ring. When rubbed, the exuviae are uncovered and appear shining black. Removed from the plant, the scale leaves a whitish patch, surrounded by a blackish ring.

♀ pale yellow, circular, mouth-parts about as far from anterior margin as their length. Anterior margin with a row of about 9 strong spines or stout hairs, such as I have seen in no other species. Anal orifice oval, a fair distance from hind end, but posterior to level of caudolateral groups of glands. 5 groups of ventral glands, caudolaterals of 3, cephalolaterals 4, median 3.

Three pairs of well-developed lobes, small but distinct, about equal in size, rounded, with a slight tendency to be notched on each side. Branched plates, hardly longer than the lobes, between them. Margin cephalad of 3rd lobe very coarsely serrate, with five large serrations, the bases of these all fringed with numerous tubular glands. Long tubular glands at bases of lobes; those cephalad of median lobes, and in the interval between 2nd and 3rd lobes much the longest; that cephalad of 3rd lobe next longest.

Hab. On leaves of New Zealand flax.

Louisiana (exact locality not known); sent by Mr. E. M. Ehrhorn. This is a species of neotropical affinities, and must have attacked the New Zealand flax since the introduction of the latter into this country as an ornamental plant. It cannot be *A. phormii* Breme, which has a white scale. In its black exuviae it resembles *A. vitis*, from which it differs in other respects. Of the New Zealand species it only comes near *A. sophorae*, with its 5 groups of glands and branched plates, but that is different in its lobes. It is very near to *A. bowreyi*, but that has 4 groups of glands, differs somewhat in the tubular glands, and also markedly in the shape of the scale. In the scar it leaves it suggests *A. personatus*, which is otherwise different. It resembles, also, *A. yuccae* Ckll. ined, but that has a different scale, and leaves a scar without any black ring. It is also allied to *A. obscurus*, but in the long glands rather resembles *A. perseae*, from which it differs in the grouped glands.

Dactylopius aphyllonis, n. sp. — ♀ 3 mm. long, of the general shape and appearance of *D. citri*, but without any caudal or lateral tufts. Dorsum covered more or less with mealy white secretion; color of body when freed from secretion olive-brown, antennae and legs small and pale, inconspicuous. Boiled in caustic soda it gives a blood red color, after the manner of *D. indicus* and *D. walkeri*.

Antennae 7-jointed; 7 much longest, a little longer than 5+6; 5 shortest, 4 and 6 equal, next longest; 2 and 3 equal, next longest, then 1. Formula 71 (32) (46) 5. Joints with sparse whorls of hairs. Color of antennae very pale yellowish. In some examples, 4 is a little longer than 6, and about as long as 3, which is not quite as long as 2; the formula is then 712 (34) 65.

Legs pale brown, ordinary, femur about as long as tibia; tarsus hardly half as long as tibia. Claw large, stout, blunt, little curved; digitules filiform. Mentum elongate, with several short bristles. Posterior

tubercles obsolete, the place of each indicated by a large bristle. Anal ring small, with 6 hairs, much smaller than bristle of lobe.

Hab. Wenatchee, Washington State, on *Aphyllon fasciculatum*. Collected by Prof. C. V. Piper. By its antennae and legs, this is clearly not *D. trifolii*.

Eriococcus neglectus, n. sp. — ♀ Enclosed in a somewhat irregular waxy pyriform scale, nearly 3 mm. long, shiny, pale ochreous, not in the least divided into plates. The scales or sacs, when boiled in soda, are seen to be really composed of very closely-felted threads. ♀ oval or subpyriform, pale pinkish, about 1½ mm. long; when boiled in soda it becomes bright crimson.

Antennae brown, joints distinct, 6 in number, 3 much longest, rather longer than 4+5, which are subequal and shortest, 5 being a little the shorter. 6 rather longer than 4, but hardly so long as 2. 1 about as long as 2. Formula 3 (12) 645. In another example, 2 is clearly shorter than 6.

Legs small, pale brown. Trochanter with two bristles. Femur moderately swollen, with a short bristle on its inner side. Tibia thick, stouter than tarsus, but about ½ shorter. Claw large, very little curved. Tarsal digitules long, filiform. Digitules of claw filiform. Posterior tubercles low and rounded, with several bristles, one longer than the rest; also round gland orifices. Anal ring small, chitinous, without bristles (or bristles easily deciduous?). Mentum obscurely tenuous. Derm colorless. Eggs pale lemon yellow.

Hab. Las Cruces, N. M., on stems of *Atriplex canescens*, looking very like the *Phoradendron* seeds so commonly seen on trees in this vicinity. The plants are thickly infested by them, but I had entirely overlooked them until recently, notwithstanding that I pass within a few feet of them on my way to and from College. The insect is peculiar for its waxy scale, and might form a new subgenus.